ABSTRACT OF THE DISCLOSURE

In an electronic ballast, a half-bridge inverter is powered from a constant DC voltage and provides an AC output voltage having a waveform with trapezoidally shaped half-cycles. This AC voltage is applied across the primary winding of a leakage transformer, whose loosely coupled secondary winding is connected across a gas discharge lamp. The internal inductive reactance of the secondary winding constitutes a lamp ballasting means by way of limiting the magnitude of the resulting lamp current to a pre-established desired level. The ballast is enclosed in a steel housing of conventional shape and size (i.e., rectangular: about 2.3" wide, 1.5" high, and 8.2" long). Significant power losses may result from magnetic coupling to the walls of the steel housing of the substantial leakage flux surrounding the leakage transformer. A significant reduction of these losses is attained by orienting the leakage transformer within the elongated steel housing in such manner as to have the main plane of the leakage transformer (i.e., the plane parallel with the flux lines in the magnetic core of the leakage transformer) positioned such as to be perpendicular to the main longitudinal axis of the steel housing and well removed from its end walls.